

City of Fort Worth Storm Water Management – Feasible Options Study **Public Involvement Process**

Meeting Summary

Forest Park/Berry Watershed Area Community Meeting March 24, 2011

Texas Christian University, Student Union Bldg

AGENDA

- 1. Open House
- 2. Welcome, Background, Meeting Objectives
- 3. Project Overview Discussion of Flood History
- 4. What You Can Do to Help
- 5. Project Timeline
- 6. Discussion & Conclusion

City of Fort Worth Staff Members Present

- Greg Simmons, Acting Director, Transportation & Public Works (TPW)
- Don McChesney, Engineering Manager, TPW Storm Water Management
- Steve Eubanks, Senior Professional Engineer, TPW Storm Water Management
- Linda Young, Senior Professional Engineer, TPW Storm Water Management
- · Eric Fladager, Planning Manager
- Cristi Lemon, Neighborhood Education Manager
- Regis Andrez, Neighborhood Education Specialist
- Linda Sterne, Communications Officer, TPW Storm Water Management
- Ranjan Muttiah, Professional Engineer, TPW Storm Water Management

Watershed Consultants in Attendance:

- Burton Johnson, P. E., Michael Baker Jr. Corporation Feasible Options Study Project Manager
- Pam Roach, President, Pam Roach Public Relations Feasible Options Study Public Involvement Consultant
- AECOM Zubin Sukheswalla

Stakeholders present:

- Berry Street Initiative Stakeholders
- Central Arlington Heights Watershed Stakeholder Committee Members
- Fort Worth Zoo
- Forest Park/ Berry residents

- Forest Park/Berry Neighborhood Association leaders
- Forest Park/Berry Business Community members
- TCU Staff members
- TCU's "The 109" Online Newsletter

OPEN HOUSE (6:30 - 7:00 P.M.)

The meeting was kicked off with an Open House where attendees visited flood-mitigation exhibits and viewed demonstrations of traditional and non-traditional measures being used to reduce flooding in neighborhoods.

WELCOME, BACKGROUND, MEETING OBJECTIVES (7:00 - 8:30 P.M.)

Greg Simmons, City of Fort Worth's Acting Director of Transportation & Public Works

Mr. Simmons made opening comments and emphasized the purpose of the Feasible Options Study. Most of the attendees were new to the project:

- The Feasible Options Study (FOS) is designed to address chronic flooding issues in Forest Park/Berry and Central Arlington Heights watersheds. This process will also help the City address flooding issues in other watersheds city-wide.
- The City has been studying flooding issues for several years but the recommended solutions
 were extremely expensive, disruptive to the community and, in many cases, would require
 phasing of construction with no improvement being realized until the final phase is
 completed.
- For a flood solution to be feasible, it must be effective, affordable and acceptable to the community. The FOS process includes open dialogue with the community that will lead to final recommendations for flooding solutions. The community's role is to voice their opinion on what is acceptable.
- FOS's public involvement methods include:
 - Community Meetings
 - Stakeholder Committees (CAH and FPB)
 - Feasible Options Study Project website –
 http://www.fortworthgov.org/tpw/stormwater/forestpark/
 - Online Community Survey Tell us how you've been impacted by flooding. Go to http://www.fortworthgov.org/tpw/stormwater/forestpark/
 - Presentations at Neighborhood Association meetings
 - Direct email address for your feedback, questions and comments -Linda.Sterne@FortWorthGov.org
 - Neighborhood Canvas
 - Historic Neighborhood Tour
- The City's goal is to identify a flood solution(s) and begin design in 2011.

Mr. Simmons then turned the meeting over to the FOS project manager, Burton Johnson, P. E., of the Michael Baker Jr. Corporation.

PROJECT OVERVIEW - Discussion of Flood History

Burton Johnson, P.E. Project Manager, Michael Baker Jr. Corp.

- 1. The current storm water system capacity is not large enough to handle major flooding events. Existing pipe capacity can only handle about 1.5 inches per hour. (Historically, this type of rain event might be expected to occur every 1-2 years.)
- 2. The total detention needed to handle a major storm event would be the equivalent of filling bottom bowl of Amon Carter Stadium five to six times.
- 3. Traditional approaches to eliminate this problem are cost prohibitive and would be disruptive to the community. No alternatives have been identified that could be phased in with improvements realized at the completion of each phase.
- 4. Some of the non-traditional approaches, although more affordable in many cases, would not have major impact on reducing flood risk.

Traditional Solutions - Mr. Johnson said that flood mitigation measures usually involve some combination of the following:

- Conveyance- Increase the size of pipes or channels
- Increase groundwater absorption (using low impact development)
- Detention Increase storage (create surface or underground detention areas)
- Avoidance flood-proofing or raising of structures, moving out
- Coping residents maintain their property, purchase flood insurance

Non Traditional Solutions under consideration during the FOS process included:

- Rain gardens
- Pervious pavement
- Rain barrels
- Underground storage modules

Mr. Johnson said that while these options are more affordable, they would not make a significant impact on reducing the flood risk in CAH or FPB.

Recommendations from Previous Studies:

- 1. Conveyance increasing existing pipe capacity
 - Pipe plans high cost and impacts to Zoo Creek
 - Tunnel Plans Even higher costs (\$43M)
- 2. Detention

- Surface Detention would require 30 acres, 147 homes, \$53M
- Underground Detention \$136M
- How much is needed? Enough to fill Amon Carter Stadium 5 to 6 times.

Mr. Johnson noted that all recommended alternatives from previous studies involved some degree of property acquisition.

Nature of Flooding Problem in Forest Park/Berry

Mr. Johnson noted that the current pipe system is not able to handle a major flood event and can't hold more than 1.5 inches of rain per hour. The estimated value of damages due to the risk of flooding is \$15 - \$20 million.

Mitigation Measures under Consideration

A list of the relief options being considered. (<u>Click here to access more details</u> – Go to slides 28 - 37)

- 1. Conveyance Concepts -
 - Smaller Conveyance Improvements (pipes)
 - Regionalization of Tunnel to provide primary conduit for drainage for watersheds beyond FPB
- 2. Detention Concepts -
 - Detention upstream of Cleburne Rd.
 - Greenway Detention tied to the **T** Station
 - Detention in flood-prone areas north of Berry
 - Detention at Paschal High School

WHAT YOU CAN DO TO HELP

- 1. Submit your ideas.
- 2. Serve on Stakeholder Committee
- 3. Complete Online Community Survey and encourage your neighbors to complete it!
- 4. Talk to your neighbors about this project. Get them involved.
- 5. We want to hear from you!

PROJECT TIMELINE

- March 24, 2011 FPB Public meeting
- April 2011 FPB Stakeholder Committee meeting
- May 17, 2011 Transit-oriented Development Town Hall Meeting
- June 2011 Consultant submits list of recommendations

DISCUSSION & CONCLUSION

Questions, Comments, Concerns

(**Please note**: Some of the Information contained in this section includes clarifications and corrections to questions asked during the community meeting)

STORM DRAIN MAINTENANCE

Comment - We are hesitant to support new flood-mitigation measures until the City
"does a better job" of maintaining existing storm water systems, which we feel is the
cause of flooding problems.

Staff response - (Greg Simmons)

- Cleaning the pipes is not the cause of the flooding problem. Even if the pipes were perfectly clean, they are still not nearly large enough.
- Under the Storm Water Utility (created in 2006) systematic inlet cleaning of the City's 30,000 inlets is a new program. Maintenance is progressing from reactive to pro-active but we have a lot of catching up to do. Critical structures which have been identified are routinely inspected for blockages or other problems. We only have 5 crews to service the 30,000 inlets so we focus on the most critical areas that are clogged and rely on citizens to tell us about other areas we may have missed. As new areas are discovered, these are added to the critical structures list.

STORM DRAIN SYSTEM CAPACITY

Question - Are the pipes the same size? What is the range of the current pipe system?

Staff response – (Steve Eubanks)

- The smallest pipe in the upper system is generally 18" to 24", although I have verified one 15" line in the far eastern tributary that drains through Paschal campus.
- The line at Berry Street where all the flooding occurs is a 6' arch.
- The outfall itself consists of two 78" pipes and a 5'x9' box.
- Question How often are the storm drains checked to make sure no water from the pipeline goes down to the waterline?

Staff response – (Steve Eubanks)

Water and sewer lines are completely separate systems from the storm drain system.
 Federal and state laws require that the Water Department keep water lines protected from cross-connections of any sort and regulate storm water getting into sanitary sewers as well as sanitary sewers overflowing or leaking into the environment.

• Question - If you built a 16-ft pipe all the way back to the Trinity River could it handle the additional water?

Consultant response (Burton Johnson)

- The flooding from Forest Park-Berry happens quickly, long before the river peaks, so there would be no problem with river capacity.
- Question How many trouble spots do we have throughout the City?

Staff Response – (Steve Eubanks)

We have 29 watersheds. Rosemont is in one of the largest served. We have \$1/2 billion to \$1 billion of critical needs right now. I don't see any way that we can get this project under design before late 2012.

FUNDING OF A FLOOD SOLUTION

 How does this all figure into your budget? What is realistic as far as this (flood solution) being funded?

Staff response (Greg Simmons)

In 2006, the Storm Water Utility was established. We now have a dedicated source of funding so we have the revenue to support a capital bond program.
 Our debt is supported by revenue we get from storm water fees. The Storm Water Utility issued \$25 million in revenue bonds in 2008-2009 and \$45 million in revenue bonds for 2010-2011.